LAKE: WHETSTONE P (VLMP 21) MIDAS:

TOWN: BLANCHARD TWP COUNTY: PISCATAQUIS MIDAS: 296
TRUE BASIN: 1
SAMPLE STATION: 1

WHOLE LAKE INFORMATION

MAX. DEPTH: 38 m. (125 ft.) MEAN DEPTH: 12 m. (41 ft.)

DELORME ATLAS #: 31

USGS QUAD: WHETSTONE POND

IFW REGION E: Moosehead Lake (Greenville)

IFW FISH. MANAGMENT: Coldwater

TRUE BASIN CHARACTERISTICS

SURFACE AREA: 99.0 ha. (244.6 a.)

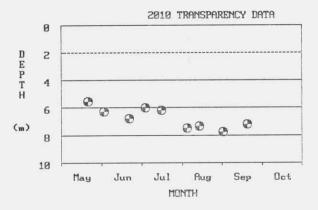
FLUSHING RATE: 0.30 flushes/yr.

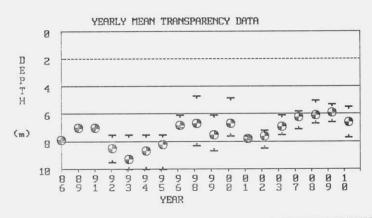
VOLUME: 14464436.0 cu. m. (11733 ac.-ft.)

DIRECT DRAINAGE AREA: 5.48 sq. km. (2.12 sq. mi.)

PLEASE NOTE THE FOLLOWING: The SAMPLE STATION # refers to the location sampled. The term TRUE BASIN is used to define areas within a lake that are separated by shallow reefs or shoals and therefore function as separate lakes. There are approximately 50 lakes in the state that have more than 1 True Basin. True Basin Characteristics are now being included in the first section of these reports to enable users of the Phosphorous Loading Methodology to better evaluate the data. If there is no data for a particular True Basin, True Basin Characteristics must be obtained from the DEP. WHETSTONE P has 1 True Basin(s).

SECCHI DISK TRANSPARENCY GRAPHS:





Note: 2010 graphs may indicate multiple readings taken on a given day.

SUMMARY OF CHEMICAL AND TROPHIC STATE PARAMETERS:

[* indicates that Secchi disk was visable at bottom of lake (or one reading used in calculation was visable)].

	MEAN	MEAN	MEAN	MEAN															
	COLOR	pН	ALK	COND.	TOTAL	PHOS.	MEANS ((ppb)_	SECCH	I DISK	(m.)		CHLOROP	HYLL	A(ppb)	TROP	HIC ST	ATE IN	DICES
	(SPU)		(mg/l)	(us	EPI	SURF	BOT.	PRO.								EPI	PHOS		
YEAR				/cm)	CORE	GRAB	GRAB	GRAB	MIN.	MEAN	MAX.	<u>N_</u>	MIN. M	EAN_	MAX.	<u>C</u>	<u>G</u>	SEC	CHL
1986	v 5 4	(4) -	10-1-1- H	-	-	- /	· -	-	7.9	7.9	7.9	1	-, 4	- 2.		-	-	-	-
1989	-	6.45	-	17	8	-	-	-	7.0	7.0	7.0	1	3.1	3.1	3.1	-	_	_	-
1990	-		-		-	-	-	-	-	-	-		2.7	2.7	2.7	-		-	-
1991	12	6.69	12.0	25	9	-	-	-	7.0	7.0	7.0	1	3.4	3.4	3.4	-	-	-	-
1992	-	-	-	-	-	-	-	-	7.5	8.5	9.5	6		-		-		23	-
1993	3	1.5	6.5	-	5	-	-	-	7.5	9.3	10.0	4	1.6	1.6	1.6	-	+1	-	-
1994	3	-	7.0	-	6	-	10	1-	7.5	8.7	10.0	5	2.3	2.3	2.3	-	***	22	-
1995	+	-	.	-		_	-	-	7.5	8.2	10.0	4	-	-	-	-		-	-
1996	15	-	33.4	12	7	-	5	+	6.1	6.8	7.0	3	5.2	5.2	5.2	-	-	-	_
1998	-	-	-	-	-		-	-	4.7	6.7	8.3	5	-	-	-	-	-	34	-
1999	-	-	-	-	-	-	-		6.1	7.5	8.7	5	-	-	-	-	-	29	-
2000	14	-	7.0	20	9		-	-	4.8	6.7	7.6	4	8.5	8.5	8.5	-	-	-	-
2001	-	-	1-1	-	_	_	-	-	7.6	7.8	7.9	2	-	-	-	-		-	-
2002	- 5		-	-	-	-	-	-	7.2	7.6*	8.5*	4	-	-	-	-	-	-	-
2003	-	-	-	-	-	-	-	-	6.1	6.9	7.5	5	-	-	-	-	-	32	-

TOWN: BLANCHARD TWP COUNTY: PISCATAQUIS

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SUMMARY OF CHEMICAL AND TROPHIC STATE PARAMETERS:

	MEAN	MEAN	MEAN	MEAN															
	COLOR	pН	ALK	COND.	TOTAL	AL PHOS. MEANS (ppb)			SECCHI DISK (m.)			CHLOROPHYLL A(ppb)			TROPHIC STATE INDICES				
	(SPU)		(mg/l)	(us	EPI	SURF	BOT.	PRO.								EPI	PHOS		
YEAR				<u>/cm</u>)	CORE	GRAB	GRAB	GRAB	MIN.	MEAN	MAX.	<u>N</u> _	MIN.	MEAN	MAX.	<u>C</u>	<u>G</u>	SEC	CHL
2007	-	-	-	-	-	-		-	5.8	6.2	7.1	4	-	-	-	-	-	-	-
2008	19	6.90	5.3	21	-	6	-	-	5.0	6.1	6.7	4		-	-	-	-	-	-
2009	-	-	-	-	-	-	-	-	5.3	5.9	6.6	6	-	-	-	-	-	40	-
2010	-	-	-	-	-	-	-	-	5.5	6.6	7.7	5	_	-	-	-	-	34	-
SUMMARY:	11	6.64	11.9	19	7	6	8	-	4.7	7.3*	10.0	18	1.6	3.8	8.5	-	_	31	-

LATE SUMMER TEMPERATURE / DISSOLVED OXYGEN PROFILES:

35.0 4.9 7.1 5.0 5.2 5.1 6.0 5.1 6.5 5.0 5.1 - -

			SAMPLE	DATE				
DEPTH	08/21/91	08/27/93	08/16/94	08/21/96	08/28/96	08/21/00		
m	°C ppm	°C ppm	°C ppm	°C ppm	°C ppm	°C ppm		
0.0	20.2 8.7	24.0 8.5	21.2 8.6	22.1 8.7	23.1 8.6	20.3 9.0		
1.0	20.2 8.7	23.1 8.5	21.2 8.7	22.1 8.7	22.9 8.7			
2.0	20.2 8.7	23.0 8.5	21.1 8.6	22.1 8.8		20.0 9.0		
3.0	20.2 8.7	23.0 8.5	21.1 8.6	21.7 8.7	21.9 8.7			
4.0	20.2 8.7	22.8 8.5	21.1 8.6	21.3 8.7	21.4 8.7	19.8 9.0		
5.0	20.2 8.7	22.1 8.5	21.1 8.6	18.4 9.0	20.3 8.9			
6.0	19.0 8.9	21.3 8.5	18.0 11.9	14.5 8.7	15.0 8.7	19.1 9.4		
7.0	16.2 10.2	16.6 11.2	13.3 12.8	11.0 8.8	12.0 8.5			
8.0	13.7 11.6	13.0 11.7	10.2 12.6	9.0 9.1	9.7 8.8	10.0 10.0		
9.0	10.3 11.0	10.8 11.3	8.8 12.2	7.8 8.8	8.0 8.6			
10.0	8.3 10.8	9.1 11.0	7.5 10.8	7.2 8.5	7.4 8.3	7.1 8.8		
11.0	7.0 10.4	7.8 10.0	6.9 9.8	6.8 8.3	7.0 8.2			
12.0	6.5 10.2	7.0 9.6	6.5 9.7	6.5 8.2	6.8 8.2	6.0 8.2		
13.0	6.0 10.1	6.7 8.9	6.2 9.7	6.2 8.0	6.1 8.2		 	
14.0	6.0 9.8	6.5 8.8	6.0 9.6		6.0 8.1	5.4 8.2		
15.0	5.8 9.8	6.2 8.7	6.0 9.5	6.0 8.0	5.9 7.9	- ' -		
16.0					5.7 7.7	5.0 8.2		
17.0	5.5 9.5	5.9 8.0			5.5 7.7	- (-		
18.0					5.5 7.7	5.0 8.2		
19.0	5.1 9.1	5.5 7.8			5.3 7.5			
20.0			5.5 8.5	5.6 7.8	5.2 7.5	4.8 8.0		
21.0	5.1 8.8	5.3 7.3			5.2 7.5			
22.0	- T072 T	= 1 = =		915 5		4.5 7.4		
23.0	5.0 8.5	5.2 7.1						
24.0	115		-		- 1	4.5 7.2		
25.0	5.0 8.3	5.1 6.9	5.2 8.0	5.3 7.4	5.0 7.0			
26.0						4.5 6.6		
27.0	5.0 8.2	5.1 6.6						
28.0					5.0 6.8	4.5 6.3		
29.0	5.0 8.0	5.1 6.4						
30.0	BP 768 7 4		5.2 7.1	5.2 7.1	5.0 6.6	4.5 5.7		
31.0	5.0 7.7	5.1 6.1						
32.0		-				4.5 5.8		
33.0	4.9 7.5	5.0 5.5						
34.0				5.1 6.9		4.5 4.8		

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TOWN: BLANCHARD TWP COUNTY: PISCATAQUIS MIDAS: 296 *TRUE BASIN: 1

*SAMPLE STATION: 1

LATE SUMMER TEMPERATURE / DISSOLVED OXYGEN PROFILES:

					S	AMPLE	DATE					
DEPTH	08/21		08/27	/93	08/16	/94	08/21/96		08/28/96		08/21/00	
m	°C	ppm	°C_	ppm	°C_	ppm	°C_	ppm	°C_	ppm	_°C_	ppm
36.0	4.9	6.9	_	-	-	-	5.1	6.0	-	-	4.5	4.3
37.0		-	5.0	5.0	-	-	5.1	6.0	-	-	-	-
38.0	-	-	-	=	5.1	5.3	-	-	-	-	-	-
20.0			-	-	5 1	4.7	_		-	-	-	_

WATER QUALITY SUMMARY

WHETSTONE POND, Blanchard Plantation

Midas: 0296, Station: 01 - Primary

The Maine Department of Environmental Protection (ME-DEP) and the Volunteer Lake Monitoring Program (VLMP) have collaborated in the collection of lake data to evaluate water quality, track algal blooms, and determine water quality trends. This dataset does not include bacteria, mercury, or nutrients other than phosphorus.

Water quality monitoring datasets for Whetstone Pond have been collected since 1986. During this period, 6 years of basic chemical information was collected in addition to Secchi Disk Transparencies (SDT). In summary, the water quality of Whetstone Pond is considered to be above average, based on measures of SDT, total phosphorus (TP) and Chlorophyll-a (Chla). The potential for nuisance algal blooms on Whetstone Pond is low.

Water Quality Measures: Whetstone Pond is a non-colored lake (average color 9 SPU) with an average SDT of 7.6m (25.1ft). The range of water column TP for Whetstone Pond is 5 - 9 parts per billion (ppb) with an average of 7 ppb, while Chla ranges from 1.6 - 8.5 ppb with an average of 3.8 ppb. Recent dissolved oxygen (DO) profiles show low DO depletion in deep areas of the lake. The potential for TP to leave the bottom sediments and become available to algae in the water column (internal loading) is low. Oxygen levels below 5 parts per million stress certain cold water fish, and a persistent loss of oxygen may eliminate or reduce habitat for sensitive cold water species.

See ME-DEP Explanation of Lake Water Quality Monitoring Report for measured variable explanations. Additional lake information can be found on the Internet at http://www.lakesofmaine.org/ and/or http://www.lakesofmaine.org/ and/or http://www.maine.gov/dep/blwq/lake.htm, or telephone the ME-DEP at 207-287-3901 or the VLMP at 207-783-7733.

Filename: WHET0296, Revised: 12/06, By: jp